

**DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION**

GREG GIANFORTE, GOVERNOR

1539 ELEVENTH AVENUE

STATE OF MONTANADIRECTOR'S OFFICE: (406) 444-2074
FAX: (406) 444-2684PO BOX 201601
HELENA, MONTANA 59620-1601**DECISION MEMO
CATEGORICAL EXCLUSION**Billings Influent Lift Station
March 2021
City of Billings
45.4801, -108.2812
Yellowstone County**PURPOSE AND NEED**

The City of Billings (City) recently discovered an issue with settled solids in their West End Interceptor, one of the three interceptors that delivers wastewater to the Water Reclamation Facility (WRF). The City then completed a study on the West End and Mid- Town Interceptors, Schedule 3 48-inch and 60-inch Interceptor Study (Morrison Maierle, 2018). The study verified the settled solids in the interceptor, identified flat and reverse grades in the interceptors, and corrosion on the inside top of pipes. The corrosion is thought to be worsened by the settled solids releasing hydrogen gas. Another contributing factor to the settled solids is the backup of wastewater into the interceptors from the plant process. The hydraulic grade line at the interceptors is halfway up the pipe even at the lowest flows. The water depth and the low flows results in low velocities and the settling of solids.

As a result of the Study the City decided to install a lift station and upgrade the interceptors to increase the velocity in the interceptors to minimize the settled solids. The purpose of the City's W.O. 19-21: Influent Lift Station Project is to install a lift station to reduce the hydraulic grade at the interceptors to allow the interceptors free flow and provide the best opportunity to scour solids. An early study evaluated seven options associated with the lift station. The option chosen was a screw pump type lift station near the Siphon Headbox (the structure where the Mid-Town and West End Interceptor combine upstream of the WRF). See Drawing 1 in Appendix A. Wastewater would be diverted out of the Siphon Headbox to the new lift station with the discharge going downstream of the Siphon Headbox for conveyance in the siphons to the WRF as flow does currently. The following are the primary reasons for selecting this option:

- Provides the greatest reduction in the hydraulic grade line in the interceptors.
- Screen pumps can handle large solids avoiding screening.
- Screen pumps do not require variable frequency drives and pump at the rate that matches the incoming without additional energy.
- Allows the gravity flow from the interceptors into the WRF when the lift station is not operating.
- Future interceptors can be brought in at lower grade.

The lift station is planned to operate intermittently, potentially once a day, to allow free flow in the interceptors to scour out any settle solids. The lift station will have a total capacity of 31.8 mgd which equates to a plant overall incoming flow of 40 mgd when including the third (Heights)

interceptor. Two screw pumps will be provided with a total capacity of 31.8 mgd. Since gravity flow will still be an option, a 31.8 mgd firm capacity (capacity with largest pump out of service) is not needed. Drawing 3 shows a layout of the proposed Siphon Headbox modifications and the new Influent Lift Station.

The Interceptor Project is the project that will replace the incoming interceptors. Coordination between the two projects resulted in adding storm water and interceptor improvements to the Influent Lift Station Project that is within the lift station site. Additionally, it was decided to increase the grade of the interceptors going into the Siphon Headbox so that the interceptors come into the very bottom of the structure. This would result in higher velocities in the interceptors when the lift station operates.

Explanation of the decision(s) that must be made regarding the proposed action (i.e. approve grant or loan and provide funding):

DNRC will approve the grant to provide funding for the Billings Influent Lift Station Project.

DNRC is not required to prepare an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) for actions that qualify for a CATEGORICAL EXCLUSION (ARM 36.17.614) or justified by a PROGRAMMATIC REVIEW; or are ACTIONS OF A SPECIAL NATURE (ARM 36.2.523(5)); or are EMERGENCIES (ARM 36.2.539). These actions are subject to review for EXTRAORDINARY CIRCUMSTANCES that would require an EA or an EIS.

ACTIONS OF SPECIAL NATURE (ARM 36.2.523)

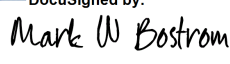
- ☐ Administrative actions: routine, clerical or similar functions of a department, including but not limited to administrative procurement, contracts for consulting services, and personnel actions.
- ☐ Minor repairs, operations, or maintenance of existing equipment or facilities.
- ☐ Investigation and enforcement: data collection, inspection of facilities or enforcement of environmental standards.
- ☐ Ministerial actions: actions in which the agency exercises no discretion, but rather acts upon a given state of facts in a prescribed manner.
- ☐ Actions that are primarily social or economic in nature and that do not otherwise affect the human environment.

CATEGORICAL EXCLUSION/PROGRAMMATIC REVIEW

- ☒ Categorical Exclusion (CE) refers to a type of action which does not individually, collectively, or cumulatively require an EA or EIS, as determined by rulemaking or programmatic review adopted by the agency, unless extraordinary circumstances, as defined by rulemaking or programmatic review, occur. This project qualifies under ARM 36.17.614 CATEGORICAL EXCLUSIONS.

☐Programmatic review means an analysis (EIS or EA) of the impacts on the quality of the human environment of related actions, programs, or policies. DNRC – CARDD does not have any programmatic reviews completed at the time of this template.

The project listed above meets the definition of Actions of a Special Nature, Categorical Exclusion or Programmatic Review including specified conditions and Extraordinary Circumstances. Included below is a supplemental checklist verifying the use of the Categorical Exclusion.

Prepared By:	Name: Demi Blythe Title: MEPA/NEPA Coordinator Email: Demitra.Blythe@mt.gov	Date: 2/22/2022
Approved By:	Name: Mark Bostrom Title: CARD Division Administrator	
Signature:	 <small>DocuSigned by: BF7A1C50B2AF4DE...</small>	Date: 2/22/2022 2:25:01 PM MST

DNRC CARDD DOCUMENTATION OF CATEGORICAL EXCLUSION DETERMINATION CHECKLIST

Project Name: Billings Influent Lift Station

Brief Description: Install lift station to and upgrade concrete pipe at WRF

Agreement Number: AC-22-0004

Date: 2/22/2022

Preparer: Demi Blythe – CARD Division MEPA/NEPA Coordinator

The Department of Natural Resources and Conservation action under 36.17.614, is excluded from the requirement to prepare an environmental assessment (EA) or environmental impact statement (EIS) if the application for department review is for any of the following projects:

(a) Projects relating to existing infrastructure systems such as sewer and septic systems, drinking water supply systems, and stormwater systems, including combined sewer overflow systems, dams, culverts, headgates, canal lining, siphons, pipelines, pump sites, lift stations, irrigation infrastructure, that involve:
[Answer yes or no. If all answers "no", an EA or EIS must be completed. If any answer is yes, skip to (b).]

1. Yes - Minor upgrading; or
2. Yes - Minor expansion of system capacity; or
3. Yes - Rehabilitation (including functional replacement) of the existing system and system components; or
4. Yes - Construction of new minor ancillary facilities adjacent to or on the same property as existing facilities; or
5. No - Projects in unsewered communities involving the replacement of existing on-site systems, provided that the new on-site systems do not result in substantial increases in the volume of discharges or in loadings of pollutants from existing sources, and do not relocate existing discharges; or
6. No - Use of sampling and monitoring wells to test for the presence of contaminants such as, but not limited to, metals and petroleum; or
7. No - Activities that do not involve or lead directly to construction, such as planning studies, scientific research and analysis, surveys, or engineering.

(b) A categorical exclusion may NOT be granted for a department action if:

[Answer yes or no. If all answers "no", skip to (c). If any answer is yes, an EA or EIS must be completed.]

1. No - The action would authorize facilities that will provide a new discharge or relocate an existing discharge to ground or surface waters;
2. No - The action would result in an increase above permit levels established for the facility under the Montana pollutant discharge elimination system or Montana ground water pollution control system for either volume of discharge or loading rate of pollutants to receiving waters;
3. No - The action would authorize facilities that will provide capacity to serve a population at least 30% greater than the existing population;
4. No - The action is not supported by the state, or other regional growth plan or strategy;
5. No - The action directly or indirectly involves or relates to upgrading or extending infrastructure systems primarily for the purposes of future development;
6. No - The department has received information indicating that public controversy exists over the project's potential effects on the quality of the human environment;
7. No - The department determines that the proposed project that is the subject of the state action shows some potential for causing a significant effect on the quality of the human environment, based on ARM 36.2.524, or might possibly affect:

- (i) sensitive environmental or cultural resource areas; or
- (ii) endangered or threatened species and their critical habitats.

(c) If the proposed project meets the conditions above in determining use of a CATEX, the

reviewer will then complete items below as follows:

[Once all steps are complete, reviewer shall sign and date at bottom. If revocation becomes necessary, reviewer shall initiate an EA or EIS as appropriate.]

1. Yes - Project meets the above Categorical Exclusion criteria.
2. Yes - DNRC determination of Categorical Exclusion.
3. Yes - DNRC distributes the Notice of Determination.
4. No - Notice of Publication and cover letter (containing revocation language below) is delivered to recipient.

5. No - Notice of Publication published in local newspaper by recipient and evidence of publication provided to reviewer.

(d) The department may revoke a categorical exclusion if:

[Only complete the steps below if revocation of a previously implemented CATEx becomes necessary.]

1. Choose an item. - The project is not initiated within the time period specified in the facility plan, or a new or modified application is submitted;
2. Choose an item. - The proposed action no longer meets the requirements for a categorical exclusion because of changes in the proposed action;
3. Choose an item. - New evidence demonstrates that serious local or environmental issues exist; or
4. Choose an item. - State, local, tribal, or federal laws may be violated.

Demi Blythe

DNRC CARD Division STATE PREPARER

Mark Bostrom - Administrator

DocuSigned by:

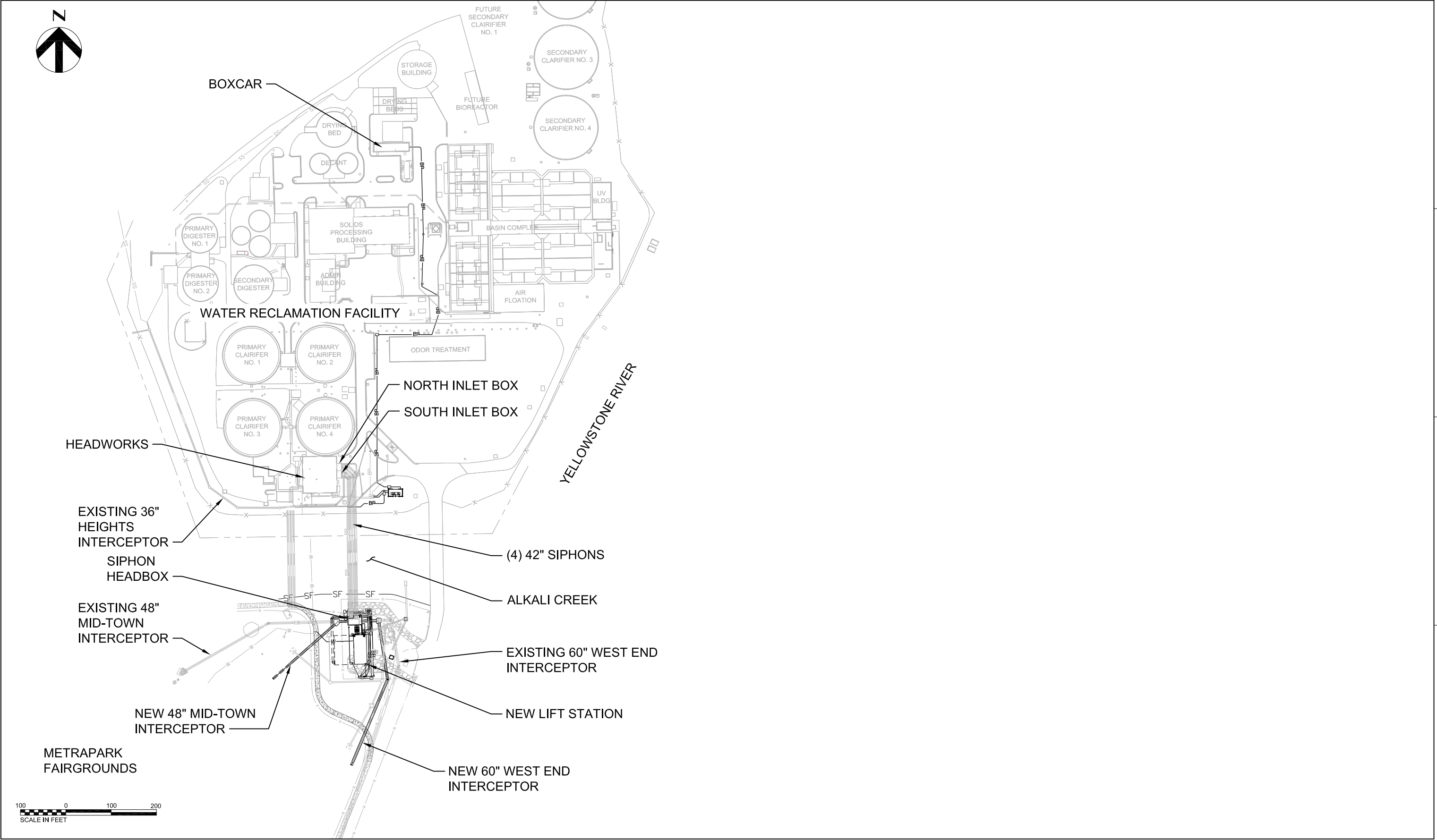
Mark W Bostrom

2/22/2022 | 2:25:01 PM MST

DNRC CARD Division STATE REVIEWER

2/22/2022

COMPLETION DATE



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	-
CIVIL	-
STRUCTURAL	-
ARCHITECTURAL	-
PROCESS	-
MECHANICAL	-
ELECTRICAL	-
INSTRUMENTATION	-
PROJECT NUMBER	10170332

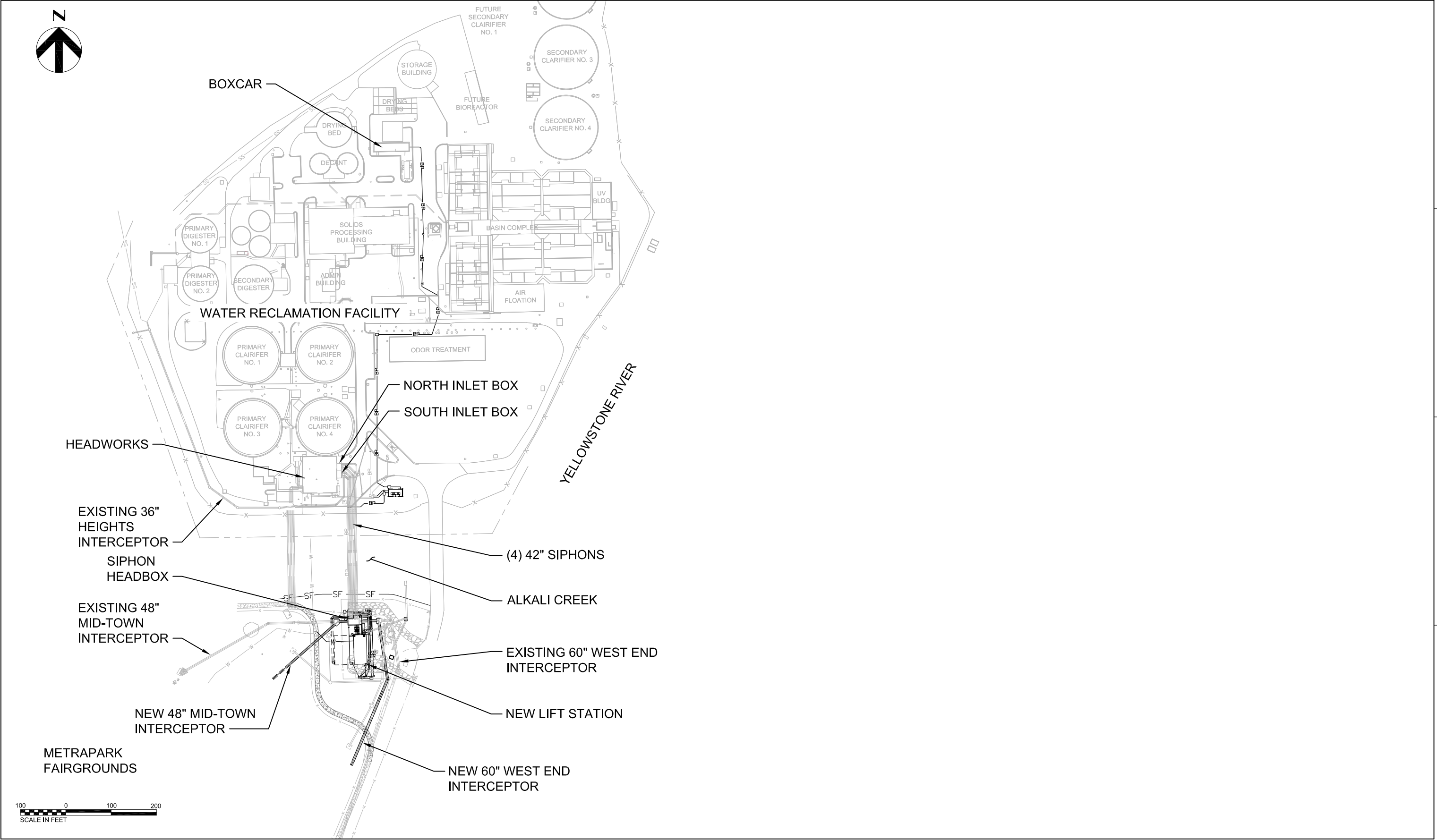


Water Reclamation Facility
City of Billings, MT
W.O. 19-21
Influent Lift Station

OVERALL SITE PLAN



FILENAME 1.dwg
SCALE 1" = 100'-0"



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	-
CIVIL	-
STRUCTURAL	-
ARCHITECTURAL	-
PROCESS	-
MECHANICAL	-
ELECTRICAL	-
INSTRUMENTATION	-
PROJECT NUMBER	10170332

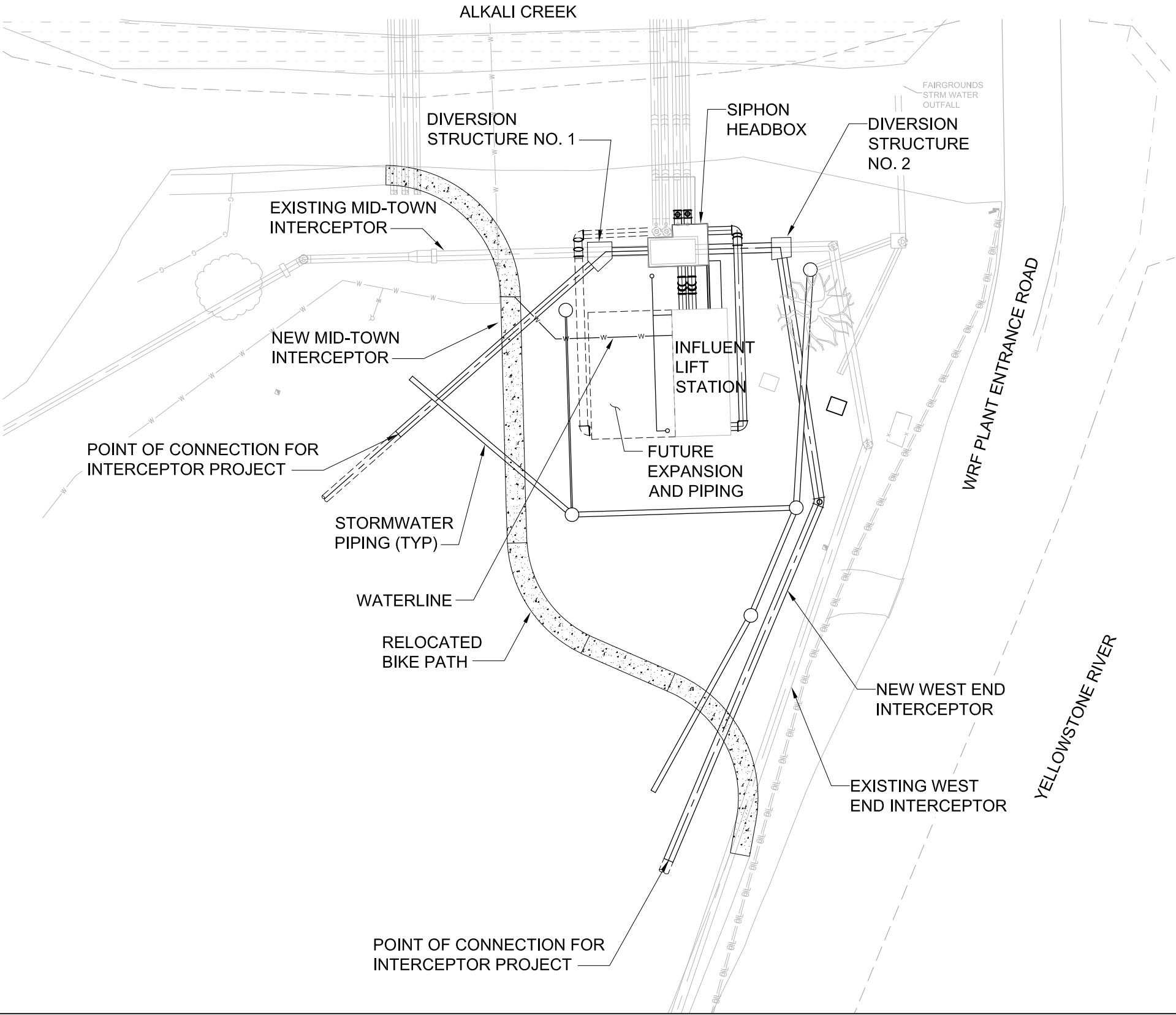
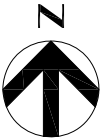


Water Reclamation Facility
City of Billings, MT
W.O. 19-21
Influent Lift Station

OVERALL SITE PLAN



FILENAME | 1.dwg
SCALE | 1" = 100'-0"



PROJECT MANAGER		
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	-
CIVIL	-
STRUCTURAL	-
ARCHITECTURAL	-
PROCESS	-
MECHANICAL	-
ELECTRICAL	-
INSTRUMENTATION	-
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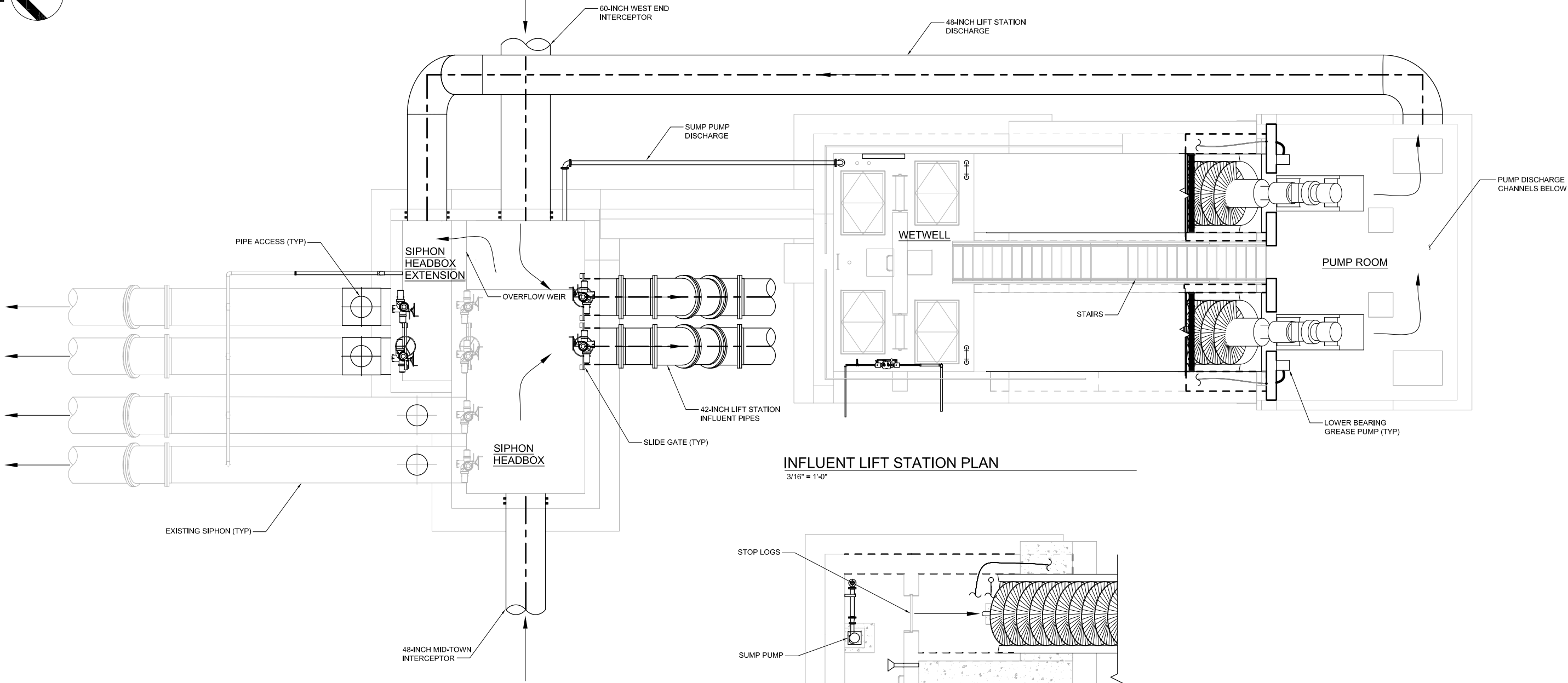
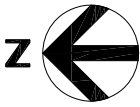


Water Reclamation Facility
City of Billings, MT
W.O. 19-21
Influent Lift Station

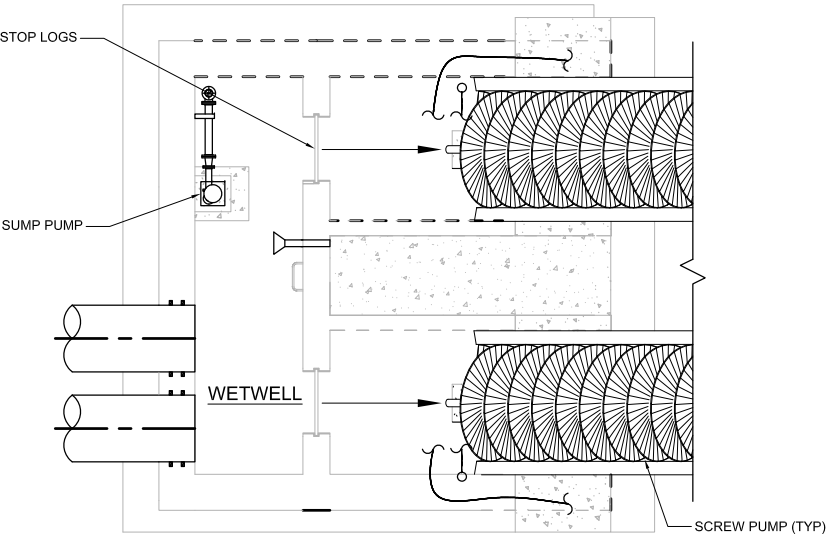
LIFT STATION SITE PLAN



FILENAME 2.dwg
SCALE 1" = 30'-0"



INFLUENT LIFT STATION PLAN
3/16" = 1'-0"



LOWER WET WELL PLAN
3/16" = 1'-0"

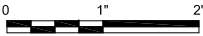


ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	-
CIVIL	-
STRUCTURAL	-
ARCHITECTURAL	-
PROCESS	-
MECHANICAL	-
ELECTRICAL	-
INSTRUMENTATION	-
PROJECT NUMBER	10170332



Water Reclamation Facility
City of Billings, MT
W.O. 19-21
Influent Lift Station



SIPHON HEADBOX & INFLUENT LIFT STATION
FILENAME 3.dwg
SCALE 3/16" = 1'-0"